

AMENDMENTS TO THE CLAIMS

1. (Currently amended): An image sensor, comprising:

a photosensitive region;

a voltage boosting circuit, said voltage boosting circuit producing a boosted reset voltage on a reset line at a level higher than a power supply output voltage level, said voltage boosting circuit comprising a first capacitor, and ~~at least one switching element~~ first and second switching elements, wherein said capacitor is first precharged at one plate by said first switching element, and subsequently isolated at said one plate by said second switching element, and biased at the other plate to produce an output voltage which is increased to a boosted voltage related to an amount of said bias added to an amount of said precharge, wherein said second switching element is one which is not forward biased by a voltage that is greater than the power supply voltage; and

a voltage protection circuit, said voltage protection circuit being connected to said reset line and protecting at least one transistor against being forward biased by said boosted reset voltage.

2. (Previously presented): An image sensor as in claim 1, wherein said voltage protection circuit further comprises at least one additional transistor of a type which can not be forward biased by said boosted reset voltage.

3. (Canceled)

4. (Canceled)

5. (Currently amended): An image sensor as in claim ~~[[4]]~~ 1, wherein said second switching element is an N type switching transistor.

6. (Currently amended): An image sensor as in claim [[4]] 1, wherein said second switching element includes first and second series connected switching transistors.

7. (Canceled)

8. (Canceled)

9. (Currently amended): An image sensor as in claim [[8]] 15, wherein said first passing transistor is an NMOS type passing transistor, and said shorting transistor is a PMOS type shorting transistor.

10. (Currently amended): An image sensor as in claim [[3]] 1, further comprising a second capacitor, charged to a different voltage than said first capacitor, to produce a second boosted output.

11. (Original): An image sensor as in claim 10, wherein one end of each of said first and second capacitors are charged by the same switch.

12. (Original): An image sensor as in claim 1, further comprising a row driver circuitry, which uses a first line as a row select, and a second line, intended for row select of a different row than a currently selected row, for a reset line.

13. (Original): An image sensor as in claim 11, further comprising a row driver circuitry, which uses a first line as a row select, and second line, intended for row select of a different row than a currently selected row, for a reset line.

14. (Canceled)

15. (New): An image sensor, comprising:

a photosensitive region;

a voltage boosting circuit, said voltage boosting circuit producing a boosted reset voltage on a reset line at a level higher than a power supply output voltage level, said voltage boosting circuit comprising a first capacitor, and at least one switching element;

an output switch, which is capable of isolating against a voltage higher than a supply voltage, which is selectively turned on and off based on a level of boosting, wherein said output switch comprises a first passing transistor and a second shorting transistor, said first passing transistor in series between said boosted reset voltage and an output line, and said second shorting transistor connected between said output line and ground; and

a voltage protection circuit, said voltage protection circuit being connected to said reset line and protecting at least one transistor against being forward biased by said boosted reset voltage.